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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/859,507	05/18/2001	Riccardo Cesarini	07040.0087	5029

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EXAMINER	
MAKI, STEVEN D	

ART UNIT	PAPER NUMBER
1733	12

DATE MAILED: 12/03/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/859,507	CESARINI ET AL.	
	Examiner	Art Unit	
	Steven D. Maki	1733	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *09 September 2003*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *31-43 and 45-76* is/are pending in the application.

4a) Of the above claim(s) *42 and 45* is/are withdrawn from consideration.

5)☒ Claim(s) *34,35,38 and 39* is/are allowed.

6)☒ Claim(s) *31-33,36,37,40,41,43,46-49,52,53,56-59,62,63,65-69,72,73 and 76* is/are rejected.

7)☒ Claim(s) *50,51,54,55,60,61,64,70,71,74 and 75* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *09 September 2003* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

13)☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

a) ☐ The translation of the foreign language provisional application has been received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) *11*.
4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other:

1) With respect to the amendment filed 9-9-03, claims 42 and 45 are "withdrawn" claims instead of "previously presented" claims.

2) The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

independent claims 31, 41 and 43

3) **Claims 31-33, 36-37, 40-41, 43 and 46 are rejected under 35 U.S.C. 103(a) as being unpatentable over Japan '206 (JP 2-133206) in view of Japan '109 (JP 5-58109) and Van Gompel (US 4350359) and optionally Seitz et al (US 4424846) and/or Great Britain '069 (GB 2114069).**

Japan '206 discloses a tire having a directional tread pattern comprising shoulder lateral grooves 11 and isolated long steeply inclined grooves 10 wherein there is no intercommunicating path between the shoulder lateral grooves and long inclined grooves. See figure 7. The claimed **two rows of lateral grooves** reads on the two rows of shoulder lateral grooves 11. The claimed **at least one third row of grooves** reads on the long steeply inclined grooves 10. Japan '206 is silent as to whether or not the end portions of the long steeply inclined grooves are *outside the footprint of the tire*.

As to claims 31-33, 36-37, 40-41, 43 and 46, it would have been obvious to provide the long steeply inclined grooves of Japan '206's tire with a sufficiently long length such that end portions of the long steeply inclined grooves extend *outside the footprint of the tire* to allow water drainage from underneath the tire footprint since

Japan '109, also directed to a directional tread pattern having isolated steeply inclined grooves, suggests providing the long steeply inclined grooves with a length of 100-300% of the length of the footprint to improve running performance on wet road (the steeply inclined grooves extending outside the footprint to allow water drainage from the footprint). Improvement of water drainage from the footprint by making the steeply inclined grooves sufficiently long as per the teachings of Japan '109 is desirable in Japan '206's tire since Japan '206's tire includes grooves. This conclusion is consistent with Great Britain '069, which teaches that tire treads are provided with grooves to permit water to escape.

As to the preamble of independent claims 31, 41 and 43, the following comments are made: First: The recitation of "tyre for a four-wheeled vehicle" relates to intended use and fails to require tire structure different from that disclosed and suggested by the above applied prior art. See MPEP 2111.02. Second: The recitation of "tyre for a four-wheeled vehicle" is sufficiently broad so as to fail to require tire structure different from that disclosed and suggested by the above applied prior art. Japan '206's motorcycle tire is capable of being used "for a four-wheeled vehicle". Van Gompel is evidence showing the capability of a motorcycle tire to be used "for a four wheeled vehicle". In Van Gompel, the four wheels of the vehicle are the two wheels of the motorcycle and wheels 40, 41. See figure 1 and 6.

As to claims 31 and 32, the claimed greater dimension / maximum distance is suggested by Japan '109's teaching to provide the grooves 2 with a length of 100% to 300% of the footprint length.

As to claims 41, 43 and 46, these claims fail to require tire structure not suggested by the above combination of Japan '206 and Japan '109 since as the tire pressure in Japan '206's tire decreases, the footprint length must increase as is well known by one of ordinary skill in the art. With sufficiently low air pressure, the isolated grooves 11 of Japan '206 become completely trapped in the footprint and produce noise upon rotation of the tire. As evidence of the understanding by one of ordinary skill in the art that isolated grooves (isolated depressions) which are trapped in the footprint produce noise upon rotation of the tire, see Seitz et al. Hence, the function of acoustical signaling described in claims 41, 43 and 46 naturally flows from the use of isolated steeply inclined grooves 11 of Japan '206 having a length greater than footprint length to allow water drainage as per the teachings of Japan '109.

As to the dependent claims: As to claim 33, Japan '206 suggests providing the grooves 10 such that at least a portion thereof is substantially straight. See figures. As to claims 36 and 37, the limitations therein would have been obvious since Japan '206 shows shaping and arranging the grooves which may have at least one straight portion so as to define a directional tread pattern.

As to claim 40, it would have been obvious to add the claimed fifth grooves since Great Britain '069, also directed to a directional tread pattern having isolated grooves, suggests using more than four rows of the isolated grooves in order to permit water to escape from the footprint while overcoming the problem of uneven wear due to movement of blocks formed by grooves which are not so isolated.

independent claims 47, 57 and 67

4) **Claims 47-49, 52-53, 56-59, 62-63, 66-69, 72-73 and 76 are rejected under 35 U.S.C. 103(a) as being unpatentable over Japan '206 (JP 2-133206) in view of Japan '109 (JP 5-58109) and Great Britain '069 (GB 2114069) and optionally Japan '907 (JP 63-116907).**

Japan '206 discloses a tire having a directional tread pattern comprising shoulder lateral grooves 11 and isolated long steeply inclined grooves 10 wherein there is no intercommunicating path between the shoulder lateral grooves and long inclined grooves. See figure 7. The claimed **two rows of lateral grooves** reads on the two rows of shoulder lateral grooves 11. The claimed **at least one third row of grooves** reads on the long steeply inclined grooves 10. Japan '206 is silent as to whether or not the end portions of the long steeply inclined grooves are *outside the footprint of the tire*.

As to claims 47-49, 52-53, 56-59, 62-63, 65-69, 72-73 and 76, it would have been obvious to provide the long steeply inclined grooves of Japan '206's tire with a sufficiently long length such that end portions of the long steeply inclined grooves extend *outside the footprint of the tire* to allow water drainage from underneath the tire footprint since Japan '109, also directed to a directional tread pattern having isolated steeply inclined grooves, suggests providing the long steeply inclined grooves with a length of 100-300% of the length of the footprint to improve running performance on wet road (the steeply inclined grooves extending outside the footprint to allow water drainage from the footprint). Improvement of water drainage from the footprint by making the steeply inclined grooves sufficiently long as per the teachings of Japan '109

is desirable in Japan '206's tire since Japan '206's tire includes grooves. This conclusion is consistent with Great Britain '069, which teaches that tire treads are provided with grooves to permit water to escape.

Furthermore, it would have been an obvious alternative to one of ordinary skill in the art to provide the tread of Japan '206 such that it is has "no circumferential grooves" (claim 57) so that "paths exist along a rolling surface of the tread pattern from a first shoulder end of the tyre to a second shoulder end of the tyre without crossing any of the grooves" (claim 47) since (1) Great Britain '206, also directed to a motorcycle tire, suggests using no circumferential grooves in a directional tread pattern to prevent uneven wear caused by ribs and / or blocks formed by such circumferential grooves and optionally (2) Japan '907, also directed to a motorcycle tire, shows a directional tread pattern having no circumferential grooves (figure 2) as being an alternative to a directional tread pattern having a circumferential groove (figure 3).

As to claim 67, it would have been obvious to provide the long steeply inclined grooves of Japan '206 so as to "cross the equatorial plane of the tyre" since Great Britain '069 suggests arranging long steeply inclined grooves 112, 114 so as to cross the equatorial plane of the tire as indicated in figure 4.

As to claims 47-48, 57-58 and 67-68, the claimed greater dimension / maximum distance is suggested by Japan '109's teaching to provide the grooves 2 with a length of 100% to 300% of the footprint length.

As to the dependent claims: As to claim 49, 59 and 69, Japan '206 suggests providing the grooves 10 such that at least a portion thereof is substantially straight.

See figures. As to claims 52-53, 62-63 and 72-73, the limitations therein would have been obvious since Japan '206 shows shaping and arranging the grooves which may have at least one straight portion so as to define a directional tread pattern.

As to claims 56, 66 and 76, it would have been obvious to add the claimed fifth grooves since Great Britain '069, also directed to a directional tread pattern having isolated grooves, suggests using more than four rows of the isolated grooves in order to permit water to escape from the footprint while overcoming the problem of uneven wear due to movement of blocks formed by grooves which are not so isolated.

Allowable Subject Matter

5) **Claims 34-35 and 38-39 are allowed.**

Claims 50-51, 54-55, 60-61, 64-65, 70-71 and 74-75 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

As to claims 34, 50, 60 and 70, there is no motivation to provide the end portions of the isolated grooves 10 in the tread pattern of Japan '206 with the claimed oppositely curved arcs.

As to claims 35, 51, 61 and 71, there is no motivation to change the symmetric tread pattern of Japan '206's motorcycle tire to an asymmetric tread pattern using the claimed different form of grooves for the first and second rows.

As to claims 38-39, 54-55, 64-65 and 74-75, there is no motivation to add the claimed fourth grooves to the tread of Japan '206 - the claimed fourth grooves starting

from a shoulder end and ending between two adjacent grooves of the at least one third row.

Remarks

6) Applicant's arguments with respect to claims 31-33, 36-37, 40-41, 43, 46-49, 52-53, 56-59, 62-63, 66-69, 72-73 and 76 have been considered but are moot in view of the new ground(s) of rejection.

Applicant's arguments filed 9-9-03 have been fully considered but they are not persuasive.

Applicant argues that motorcycle tires are fundamentally different, at least in construction and road behavior, from tires for four-wheeled vehicles. This argument is not persuasive. In claims 31, 41 and 43, the description of "tyre for four-wheeled vehicle" relates to intended use and is sufficiently broad so as to read on a motorcycle tire. The motorcycle tire of Japan '206 is capable of use "for a four-wheeled vehicle". See for example Van Gompel.

Applicant's argument that motorcycle tire references cannot be properly combined with references directed to passenger car tire references is not persuasive since enhancement of wet performance (e.g. water drainage) of a tread is desirable for motorcycle tires and passenger car tires; applicant having provided no convincing argument and/or evidence to the contrary.

7) Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

8) Any inquiry concerning this communication or earlier communications from the examiner should be directed to Steven D. Maki whose telephone number is 703-308-2068 until Dec. 18, 2003 and (571) 272-1221 after Dec. 18, 2003. The examiner can normally be reached on Mon. - Fri. 7:30 AM - 4:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Crispino can be reached on (703) 308-3853. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9310 for regular communications and (703) 872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

Steven D. Maki
November 29, 2003

Steven D. Maki 11-29-03
STEVEN D. MAKI
PRIMARY EXAMINER
~~GROUP 1300~~
Au 1733